

SEABIRD ISLANDS

No. 76

De Witt Island, Tasmania

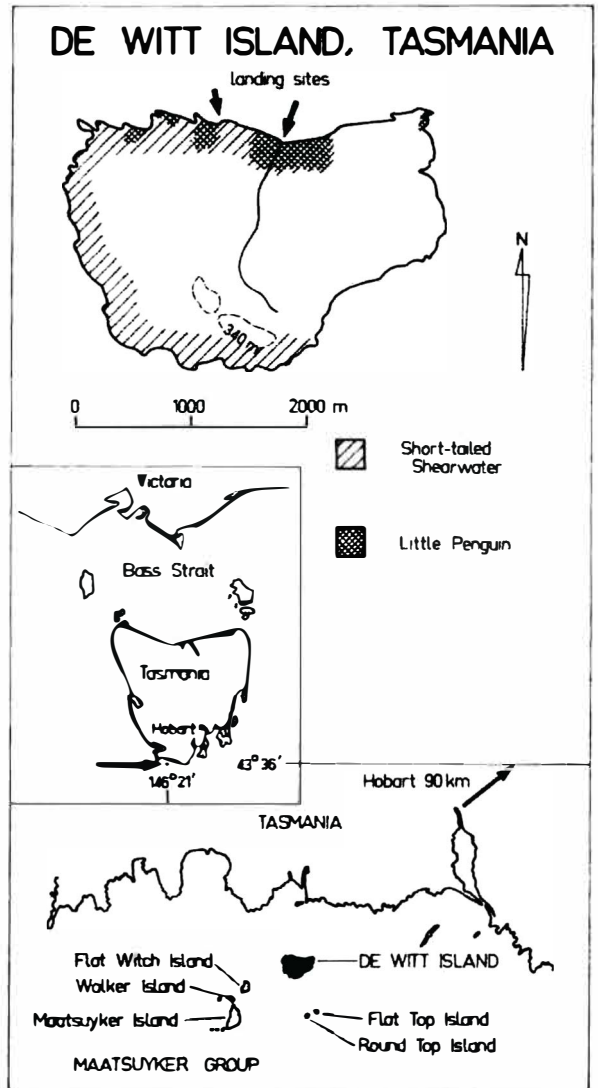
Location: 43° 36' S., 146° 21' E.; the northernmost of the six islands comprising the Maatsuyker Group and lying 6 km south of Louisa Point, the nearest approach from the Tasmanian mainland.

Status: Part of the South-west National Park administered by the National Parks and Wildlife Service (Tas.).

Other Name: "The Big Witch".

Description: 518 ha; 3.2 km long by 2.2 km at the widest, with the summit 354 m in height on the southern side. It is the largest island of the group and precipitous cliffs line most of its shores. The vegetation is dominated by a eucalypt forest which covers much of the northern side of the island and extends across to the higher slopes on the western side.

Eucalyptus nitida, *E. ovata* and *E. obliqua* are the main species, with a canopy frequently approaching 20 m in those areas. Within the forest and in other relatively sheltered places *Eucryphia lucida*, *Nothofagus cunninghamii*, *Anopterus glandulosus*, *Zieria arborescens*, *Leptospermum scoparium*, *Banksia marginata*, *Cyathodes juniperina*, *Cenarrhenes nitida*, *Melaleuca squarrosa*, *Pimelea drupacea*, *Billardiera longiflora*, *Monotoca glauca*, *Trochocarpa disticha* and *Pittosporum bicolor* occur, together with the ferns *Histiopteris incisa*, *Blechnum watsii*, *Dicksonia antarctica* and *Polystichum proliferum*. A dense growth of *Pteridium esculentum* covers areas near the shoreline on the northern side and is gradually spreading into parts of the forest which it is apparently replacing. On the more exposed slopes, including the cliffs and in the immediate vicinity of the shoreline, dwarf forms of some of the species listed above occur together with *Cyathodes abietina*, *Acacia verticillata*, *Olearia perssonioides*, *O. phlogopappa*, *Westringia brevifolia*, *Helichrysum paraliun*, *Epacris myrtifolia*, *E. impressa*, *Correa backhousiana*, *Pomaderris apetala*, *Rhagodia baccata*, *Carpobrotus rossii*, *Tetragonia implexicoma* and the blue tussock grass *Poa poiformis*.



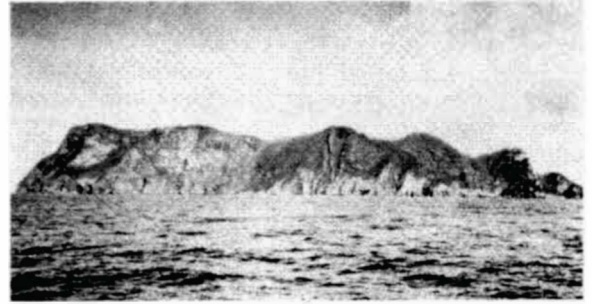
Soil cover is extensive, varying from shallow in a few exposed areas to relatively deep in forest gullies. Large areas of the island are apparently unsuited for breeding by the seabirds, possibly due to the distance from the sea and the thick canopy.

Landing: There are two small inlets on the northern side suitable for landings, of which the more easterly is preferred. Because of the island's exposed position in the path of prevailing westerly winds, storms and big seas may prevent a landing for days at a time during summer and for much longer periods at other times of the year.

Ornithological History: The island received considerable publicity when a girl named Jane Cooper camped there on and off between 22 August 1971 and 9 March 1972. Among other things one of the reported purposes of her stay was to study the wildlife. However, apparently no reports of her visits were published or lodged with any interested organisation. The only known visits where ornithological data was compiled were those made by G. White from 17-26 February 1975, 12 September to 15 December 1975, 3 January to 27 April 1976, 07:00 hours to 09:30 hours on 14 May 1976, 11-19 December 1976 and from 20 January to 7 February 1977.

Breeding Seabirds and Status

Eudyptula minor Little Penguin — The main colonies are located around the two landing inlets where the ground is relatively flat, but small groups breed in other places mainly along the northern shoreline. In the 1975-76 season, breeding had apparently commenced by the latter half of August as newly hatched chicks were found by the end of September. The breeding season was protracted and the last chick departed about the end of March. The main egg laying period was from late September through to late October. Incubation averaged about 36 days with the chicks remaining under the constant supervision of a parent for 16 to 18 days after hatching. They were deserted by the parents when about nine weeks old. No evidence of second clutches was found following the successful completion of first brood. The adults were ashore for 17 to 19 days to moult, usually not long after raising their chicks. There were few



• De Witt Island (looking west).

birds remaining ashore by the latter part of April. In 1976-77 the breeding cycle appeared to be following a similar pattern to that of the previous year. Estimated 2 000 breeding pairs in 1976-77 season.

Puffinus tenuirostris Short-tailed Shearwater — Colonies are well distributed around the periphery of the island except on the eastern side, with the largest colonies around the two landing inlets. In the 1975-76 season the first arrivals reached the island on 22 September. Eggs were laid between 21 and 29 November with the chicks hatching between 12 and 20 January. Although the departure of the young birds on their northward migration is not expected until the latter part of April or early in May, in 1976 no chicks were found in burrows by the end of March and adults had ceased flying in at night by that time. Rats preying on the chicks on a major scale appeared to be the main reason for the premature disappearance. However, many chicks died from starvation after mid-February. This is normal as the intervals between feeding nights after that time become more protracted. In 1976-77 eggs were hatching as late as 23 January, but it was not known to what extent the rats caused interference to the chicks that season. Estimated 20 000 breeding pairs.

Factors Affecting Status

Several fishermen frequently set fire to the vegetation around the landing inlets in the breeding season causing heavy casualties among the penguin colonies. Three fires, one in December 1975 and two in the spring of 1976,



- *View of typical vegetation on De Witt Island (looking westward). Breeding colonies occur only in the clearer areas around the shore line.*

reduced the population of breeding penguins by almost a thousand in that period with even greater toll on the chicks. In addition, birds are sometimes killed for crayfish bait, although this practice apparently has been declining in recent years.

OTHER VERTEBRATES

Eastern Swamp-rat *Rattus lutreolus* — Extremely numerous in the 1975-76 breeding season causing considerable interference to the penguins and shearwaters. The rat population fluctuated greatly from one year to another during the period of White's visits; it seems unlikely that the rats would cause such serious harm in years when their numbers are down.

Tasmanian Pademelon *Thylogale billardierii* — Present in small numbers but unlikely to cause any harm to the breeding seabirds.

Small-scaled Skink *Leiopisma pretiosa* — Common over much of the island.

Other Seabirds Recorded

<i>Pachyptila turtur</i>	Fairy Prion*
<i>Ardea novaehollandiae</i>	White-faced Heron
<i>Haematopus fuliginosus</i>	Sooty Oystercatcher
<i>Larus novaehollandiae</i>	Silver Gull

* A prion landed on the island during daylight on 5 February 1977 and immediately disappeared from sight down a shearwater burrow. The bird appeared distressed and may have been pursued by a predator.

Banding

Nil.

Bibliography

1. Lord, C. (1927), 'Southern Outposts', *Emu* 27: 16-19.
2. White, G. (in prep.), 'Islands of South West Tasmania'.

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